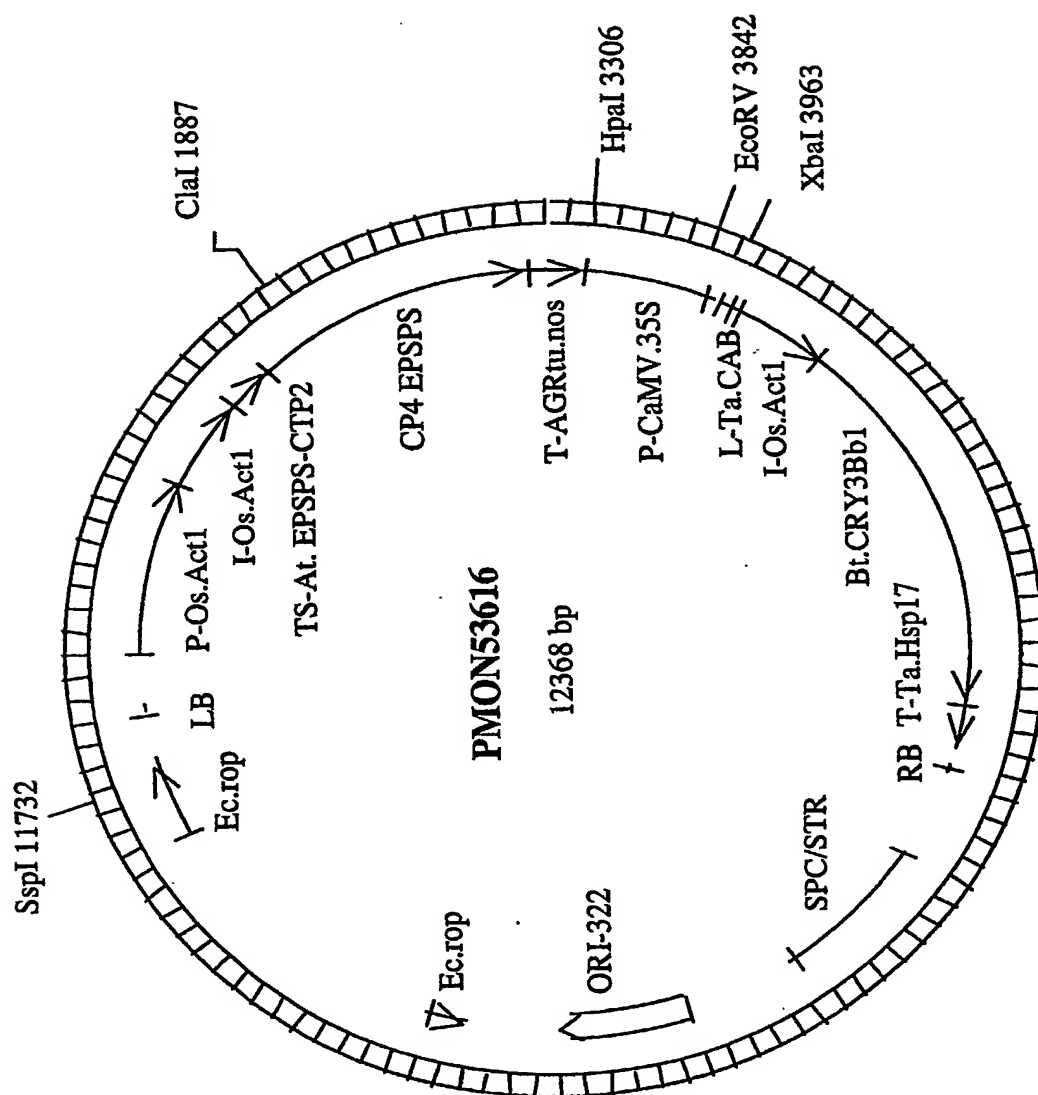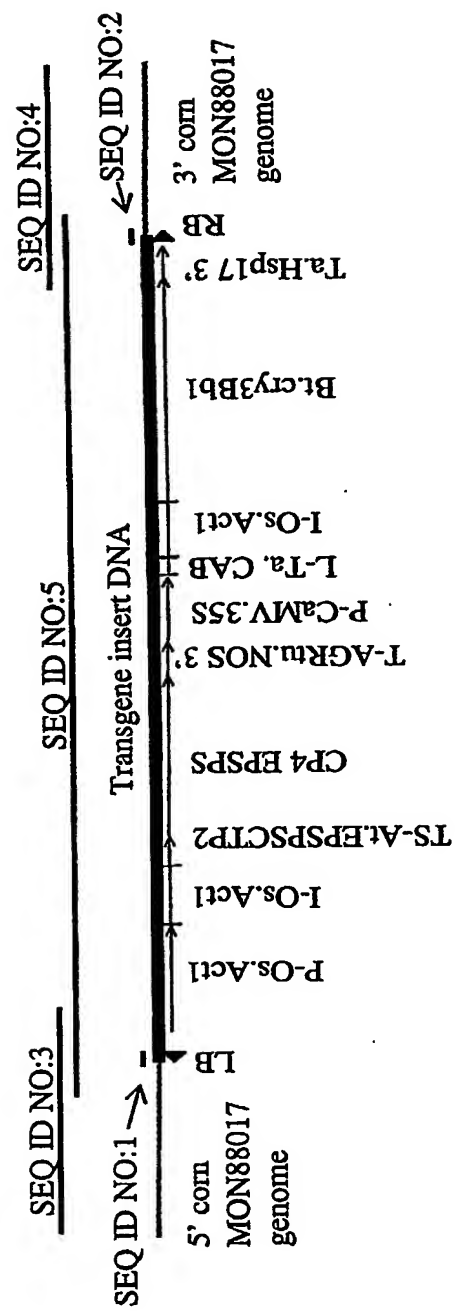Figure 1

Figure 2

```
GACCAGCGTCTCCCGCCGCACCCGCAGTCTGCACCGTAGAGATCGGATGTACAGGCA
TGTAGCATTAGGCTATTCAGCGGCTCTCGTATCTTATTCCCTACCATCTATTTTATC
TACACTGTATAATACTCCCTCCGTTTATTGTTTATTTGTCGTTGAATAGTTCAATAT
TTGCACTGTCCAGCGACAACTAAAATGAAACGGAGTGAGGTAGTGTTTTGTACAACC
ATATATAGAGGTGCCCAAACGGGCGGCCCGGCCCGGGCCCGTCAGGCCCGACGGTTA
ATCGGGCCGTGCCCGGCCGGCCCCGTGCCGTAGCCGTGGCCCAGGCACGGCGTGCCG
GGCCAGCCGTTTAACTGGTCACGTTCTCCCGCCTAACTGAAGGACACTAACCAATAT
AACTCGTGAGCATTTGTTGTAAATAGCTAATATAAAATGTAAATATATATACTATGT
TTTATAAAATAAAAAATATATAATCGTGCCGGCCAGGCCGGCACTGCGGGCCAAGAC
AGCGGCCCAAGCACGTCACGGTTCTCGTGCCGGGCCGGCCCCGGCATCGTGTTTCAG
GCCGGTCCGTTAGGCACGGCTCATTTGGCCCTCTATAACCATATATCATATTCATCG
ACGACCTTGGGCTAAGGCAGACCGACGGCCGCCCTAGGCCCCAGATCTATAGAGGCT
TAATGCTAAATATAAATTCAGTAGTTAGACTATCAATGTATGATATAATAGTTTAGC
AACAAAATACTAAAGAATTTATGGCTACGATGTTTTCATAATCCGATCTTATCTAAA
CATGTTAGAAGGAAATTTTAAAGTAATATTATAATATGTATCTTTTTATTTACTTAT
TGCTTGATATAGATATTTTTGATCTATCTTAAGTGTTTTATATTGATAATATTTATG
TATATAAAGAATTAGAATAGTCCTATTTTAAATTTTGTCCTGAACCCCTAAAATCCC
AGGACCGCCACCTATCATATACATACATGATCTTCTAAATACCCGATCAGAGCGCTA
AGCAGCAGAATCGTGTGACAACGCTAGCAGCTCTCCTCCAACACATCATCGACAAGC
ACCTTTTTTGCCGGAGTATGACGGTGACGATATATTCAATTGTAAATGGCTTCATGT
CCGGGAAATCTACATGGATCAGCAATGAGTATGATGGTCAATATGGAGAAAAAGAAA
GAGTAATTACCAATTTTTTTTCAATTCAAAAATGTAGATGTCCGCAGCGTTATTATA
AAATGAAAGTACATTTTGATAAAACGACAAATTACGATCCGTCGTATTTATAGGCGA
AAGCAATAAACAAATTATTCTAATTCGGAAATCTTTATTTCGACGTGTCTACATTCA
CGTCCAAATGGGGGCTTAGATGAGAAACTTCACGATTTGGCGCGCCAAAGCTTACTC
GAGGTCATTCATATGCTTGAGAAGAGAGTCGGGATA
```

Figure 3

CAAACTCCACATGGGCTTCTCGGGCGACAAGAATGAACTGATCATTGGTGCTGAGTC
CTTCGTCTCCAACGAGAAGATCTACATCGACAAGATCGAGTTCATCCCCGTCCAGCT
GTGATAGGAACTCTGATTGAATTCTGCATGCGTTTGGACGTATGCTCATTCAGGTTG
GAGCCAATTTGGTTGATGTGTGTGCGAGTTCTTGCGAGTCTGATGAGACATCTCTGT
ATTGTGTTTCTTTCCCCAGTGTTTTCTGTACTTGTGTAATCGGCTAATCGCCAACAG
ATTCGGCGATGAATAAATGAGAAATAAATTGTTCTGATTTTGAGTGCAAAAAAAAAG
GAATTAGATCTGTGTGTGTTTTTTGGATCCCCGGGGCGGCCGCTCGAGCAGGACCTG
CAGAAGCTAGCTTGATGGGGATCAGATTGTCGTTTCCCGCCTTCAGTTTAAAC<u>AGAG</u>
<u>TCGGGTTTGGATGGTCAACTCCGGCATACTGCCGAAAACAAACCAATCCGTCACCGT</u>
<u>CAAGGCCCCGCACCGCTGGCCGCACGCAGGAAAAATAAGTTGCGACCGCGAGCGGGC</u>
<u>GAATCAGAAAGGGCGTCCGGCCTTGGTCAGACACGACAGCGACGCGGAAAGGCTGCG</u>
<u>CCCGCGGTGCCATCTACAAGGGTCCACGTCCATCCAAAAAGAGCGGTGCCCTGGACT</u>
<u>TCTCCCTCGTGTTCCTACTTCCTACGCGAAGGAAGCCAGGCAGGTGCGCAGCTTTTC</u>
<u>CAACCTTCCACCCCCCCCGTGCGGCGCTCCCACGCTGAGTCGCTGACCGCTCGCGCC</u>
<u>TCTCTTCGCCTCCTCCTCACTCGCCGCGTCCTCCGCAGCACAGCCCACTCGCATCGG</u>
<u>ATCGCGCGCGGGGAGCGGCATGGCCGGCGACGACGGCAGCGGCGGGAGCGGAGGCGG</u>
<u>CAACAGGGAGGACGAGGTCCACGTGCAGATCGCAGGTCAGTGTCAGTCCTCCGCTCG</u>
<u>TTCTCTCTCTCTCCGACGGACAGTGTGAACTATGTCGGGTCGTCGTTGAGGATGCGA</u>
<u>TGAGAGGAGCGCGGGAAGGACTGTCGTAGATTGGATTTGCTCTGCAGTGCGTGGGTA</u>
<u>GCCCCGAGTCCCCGACACATGTTCTTTTTTCTCGGGTTATGTCAGCGGCGGTACGTC</u>
<u>GTTGGAACGCTCAAGCGCGAGAGGTGTTCGATGAATTACCTTCTGGTGTGTGGCGTA</u>
<u>CCGGTGGGTCAGTGGGGTTTTTGGTTCGTGTACGGGATTTGGGGTTGGGGGTCATCT</u>
<u>CCCTTCTTCAGTGCGCGCGCTCACGAGTCACGGCTGTCTTGTGATTGCTGCATCTGT</u>
<u>GCCATGTGCTCGTGCGTGCGTTTTCAGTTACTGGCCATTGACACTGAGTGAATGTTC</u>
<u>GGTTGGTCGTCCGATAGGGTTGGTTCAGCTGTTAATTACGACTCCAAGTATCTGAAA</u>
<u>CATTTCATGAGGATGTGTAGGGAACCTTACTTTATGCACTTCAATGGCCAGGCCAGG</u>
<u>CCTGTATTATCTTTTTCTTGTTTGGGAATAATGATGTGAGCTTTAGGGGAGCAGCGC</u>
<u>TGCTTCTTCTTTTTTTTTTTCTCCAGAAAAAGTCATAGATATACCGTGGACAATTTCT</u>
<u>TTGTGTGCGGTAATTTTAGAGCACTGTGGGTTTGTGCCCTGTTCGTCAGGAAAAGTA</u>
<u>CCCAAGCTGGGATTTCACTTGGGTCTAAGAAACCAGCGTTTCAGTTTGGGGGGTCTC</u>
<u>CTGGTACCCTGAAGTGCTTACCATTTATAGTTCCCGGATGACCTGTTCATAATGCCT</u>
<u>TCTGTATGTTGTTTGCAGGATCATCCAAACCTGAAACCTCATCTACCAACGAAACAG</u>
<u>CTCCTCAAAACTCTCATACCAAGCATTGGCATTGGTGGCTGATGGTAACTCTGAACA</u>
<u>TTTTCTTCCTCGTTGCTGGTCAGACAGCATCGACACTCCTTGGCAGGTTCTACTACA</u>
<u>ACCAAGGTGGAAATAGCAAGTGGATGTCCACATTTGTCCAAACCGCTGGCTTTCCAG</u>
<u>TGCTGTTCGTCGCCCTATATCTGTTCCGTTCAAAATCGCCTTCTACACAAACAACCA</u>
<u>CCAGTAACCCTGAGACTTCTGTCACCAAAATTACTCTTATATATGTTGTCTTGGGCC</u>
<u>TCATCATTGCTGCCGATGACTTGATGTATTCCTATGGCCTGTTGTACCTTCCTGTAT</u>
<u>CAACATATTCGCTCATTTGCGCTAGTCAGCTGGCCTTCAATGCTGTCTTCTCATATG</u>
<u>TCCTAAATGCTCAAAAGTTCACCCCATTCATTTTCAACTCAGTAATTCTCCTTACTT</u>
<u>TTCCCGCTGCGCTTCTTGGAGTTGACGAAGATTCTCAGGGTACCAATGGTTTATCGC</u>
<u>GTGGGAAGTACATATTGGGTTTCGCATTGACCCTAGGAGCCTCGGCCACATACTCAC</u>
<u>TAATTCTCTCTCTAATGCAAGTCGCATTCGAGAAGGTTATTAAGAAGGAAACTTTCT</u>
<u>CAGTCGTGTTGAATATGCAGATATATACAGCACTAGTGGCAACAGTAGCTTCTCTTA</u>
<u>TCGGTTTATTTGCAAGCGGCGAGTGGAAG</u>

Figure 4A

ACTTTAGAGGGAGAGATGCATGCCTTCAGCTCAGGGAGGGTGTCCTATGTGATGACA
CTTCTATGGACTGCTGTATCTTGGCAGATAGCTTCCGTAGGAGTGGTGGGTTTGATC
TTTG
TTGTGTCATCACTCTTTTCAAATGTGATAAGCACACTGGCTCTACCCATCATTCCGA
TTTTTGCTGTGATTTTCTTCCACGACAAGATGGATGGAGTGAAGATTATTGCTATGT
TGATGGCCATCTGGGGATTCGTTTCATATGGATATCAATTATATGTCAGTGACAAGA
AGGCTAGGAAGACTTCAGTCAGTGTGGAGGAGAATTCCTAAGCGCTTGTTGGCCTGT
TACATTGGTCTTTGTGGCTCCTATACCACTTTAAGTTGCTGGTATTGAGGAGGTACT
AGTTATTGACTTATTGTATCCAAAAGGAGCTCAGTTGAGAATCTCAGGTTTACACAA
TTCATAGGTATATACTTCTGTTAGTATTGTCATATCATCATATGTACCGATGTACGG
TTGTGTTGTCCTTTAAAATAAAAAGATTAGCATTTCCAGAGGCATGCTCTCTAGATT
TCTAATTGCCTTAAATATTTTCTTGCCTTTGTTTTGTTTTTTTTTTTTTGCTATTAA
CTGTGATTTGTGATTCTATGGTTTGACATATAGTATTTCTAGGTGGTGTGCATGCTG
ATCCTGCTTATTCTACTATGAATTAAATGCAGTATAGGTCCATTAACTTTTGCATGC
GAGCTTCTTGGTGAAAGCCCTGCGTGGTTTGGTTTTGATAACTGAGTGACAGTTAGT
AAAGGTTTTTTGTGTACCACATTTTCTTAGTGTTCTTCACTCCAAATTTGATAGGCG
AGGCTCGATCTTATTCAGTTGCTTGGCTTTCCTTGTTATAACGCCTCAGCTAATCTG
GCTTTGTTTCCTTATGCATACCTTCTGTAATCTAACACCAAACCACAGATGTTGCAT
GTCCATTCTCCATGG

Figure 4B

```
   1  TACCCGATCA GAGCGCTAAG CAGCAGAATC GTGTGACAAC GCTAGCAGCT

  51  CTCCTCCAAC ACATCATCGA CAAGCACCTT TTTTGCCGGA GTATGACGGT

 101  GACGATATAT TCAATTGTAA ATGGCTTCAT GTCCGGGAAA TCTACATGGA

 151  TCAGCAATGA GTATGATGGT CAATATGGAG AAAAAGAAAG AGTAATTACC

 201  AATTTTTTTT CAATTCAAAA ATGTAGATGT CCGCAGCGTT ATTATAAAAT

 251  GAAAGTACAT TTTGATAAAA CGACAAATTA CGATCCGTCG TATTTATAGG

 301  CGAAAGCAAT AAACAAATTA TTCTAATTCG GAAATCTTTA TTTCGACGTG

 351  TCTACATTCA CGTCCAAATG GGGGCTTAGA TGAGAAACTT CACGATTTGG

 401  CGCGCCAAAG CTTACTCGAG GTCATTCATA TGCTTGAGAA GAGAGTCGGG

 451  ATAGTCCAAA ATAAAACAAA GGTAAGATTA CCTGGTCAAA AGTGAAAACA

 501  TCAGTTAAAA GGTGGTATAA AGTAAAATAT CGGTAATAAA AGGTGGCCCA

 551  AAGTGAAATT TACTCTTTTC TACTATTATA AAAATTGAGG ATGTTTTTGT

 601  CGGTACTTTG ATACGTCATT TTTGTATGAA TTGGTTTTTA AGTTTATTCG

 651  CTTTTGGAAA TGCATATCTG TATTTGAGTC GGGTTTTAAG TTCGTTTGCT

 701  TTTGTAAATA CAGAGGGATT TGTATAAGAA ATATCTTTAG AAAAACCCAT

 751  ATGCTAATTT GACATAATTT TTGAGAAAAA TATATATTCA GGCGAATTCT

 801  CACAATGAAC AATAATAAGA TTAAAATAGC TTTCCCCCGT TGCAGCGCAT

 851  GGGTATTTTT TCTAGTAAAA ATAAAGATA AACTTAGACT CAAAACATTT

 901  ACAAAAACAA CCCCTAAAGT TCCTAAAGCC CAAAGTGCTA TCCACGATCC

 951  ATAGCAAGCC CAGCCCAACC CAACCCAACC CAACCCACCC CAGTCCAGCC

1001  AACTGGACAA TAGTCTCCAC ACCCCCCCAC TATCACCGTG AGTTGTCCGC

1051  ACGCACCGCA CGTCTCGCAG CCAAAAAAAA AAGAAAGAA AAAAAGAAA

1101  AAGAAAAAAC AGCAGGTGGG TCCGGGTCGT GGGGGCCGGA AACGCGAGGA

1151  GGATCGCGAG CCAGCGACGA GGCCGGCCCT CCCTCCGCTT CCAAAGAAAC

1201  GCCCCCCATC GCCACTATAT ACATACCCCC CCCTCTCCTC CCATCCCCCC

1251  AACCCTACCA CCACCACCAC CACCACCTCC ACCTCCTCCC CCCTCGCTGC

1301  CGGACGACGA GCTCCTCCCC CCTCCCCCTC CGCCGCCGCC GCGCCGGTAA

1351  CCACCCCGCC CCTCTCCTCT TTCTTTCTCC GTTTTTTTTT CCGTCTCGGT

1401  CTCGATCTTT GGCCTTGGTA GTTTGGGTGG GCGAGAGGCG GCTTCGTGCG

1451  CGCCCAGATC GGTGCGCGGG AGGGGCGGGA TCTCGCGGCT GGGGCTCTCG
```

Figure 5A

```
1501   CCGGCGTGGA   TCCGGCCCGG   ATCTCGCGGG   GAATGGGGCT   CTCGGATGTA

1551   GATCTGCGAT   CCGCCGTTGT   TGGGGGAGAT   GATGGGGGGT   TTAAAATTTC

1601   CGCCGTGCTA   AACAAGATCA   GGAAGAGGGG   AAAAGGGCAC   TATGGTTTAT

1651   ATTTTTATAT   ATTTCTGCTG   CTTCGTCAGG   CTTAGATGTG   CTAGATCTTT

1701   CTTTCTTCTT   TTTGTGGGTA   GAATTTGAAT   CCCTCAGCAT   TGTTCATCGG

1751   TAGTTTTTCT   TTTCATGATT   TGTGACAAAT   GCAGCCTCGT   GCGGAGCTTT

1801   TTTGTAGGTA   GAAGTGATCA   ACCATGGCGC   AAGTTAGCAG   AATCTGCAAT

1851   GGTGTGCAGA   ACCCATCTCT   TATCTCCAAT   CTCTCGAAAT   CCAGTCAACG

1901   CAAATCTCCC   TTATCGGTTT   CTCTGAAGAC   GCAGCAGCAT   CCACGAGCTT

1951   ATCCGATTTC   GTCGTCGTGG   GGATTGAAGA   AGAGTGGGAT   GACGTTAATT

2001   GGCTCTGAGC   TTCGTCCTCT   TAAGGTCATG   TCTTCTGTTT   CCACGGCGTG

2051   CATGCTTCAC   GGTGCAAGCA   GCCGGCCCGC   AACCGCCCGC   AAATCCTCTG

2101   GCCTTTCCGG   AACCGTCCGC   ATTCCCGGCG   ACAAGTCGAT   CTCCCACCGG

2151   TCCTTCATGT   TCGGCGGTCT   CGCGAGCGGT   GAAACGCGCA   TCACCGGCCT

2201   TCTGGAAGGC   GAGGACGTCA   TCAATACGGG   CAAGGCCATG   CAGGCGATGG

2251   GCGCCCGCAT   CCGTAAGGAA   GGCGACACCT   GGATCATCGA   TGGCGTCGGC

2301   AATGGCGGCC   TCCTGGCGCC   TGAGGCGCCG   CTCGATTTCG   GCAATGCCGC

2351   CACGGGCTGC   CGCCTGACGA   TGGGCCTCGT   CGGGGTCTAC   GATTTCGACA

2401   GCACCTTCAT   CGGCGACGCC   TCGCTCACAA   AGCGCCCGAT   GGGCCGCGTG

2451   TTGAACCCGC   TGCGCGAAAT   GGGCGTGCAG   GTGAAATCGG   AAGACGGTGA

2501   CCGTCTTCCC   GTTACCTTGC   GCGGGCCGAA   GACGCCGACG   CCGATCACCT

2551   ACCGCGTGCC   GATGGCCTCC   GCACAGGTGA   AGTCCGCCGT   GCTGCTCGCC

2601   GGCCTCAACA   CGCCCGGCAT   CACGACGGTC   ATCGAGCCGA   TCATGACGCG

2651   CGATCATACG   GAAAAGATGC   TGCAGGGCTT   TGGCGCCAAC   CTTACCGTCG

2701   AGACGGATGC   GGACGGCGTG   CGCACCATCC   GCCTGGAAGG   CCGCGGCAAG

2751   CTCACCGGCC   AAGTCATCGA   CGTGCCGGGC   GACCCGTCCT   CGACGGCCTT

2801   CCCGCTGGTT   GCGGCCCTGC   TTGTTCCGGG   CTCCGACGTC   ACCATCCTCA

2851   ACGTGCTGAT   GAACCCCACC   CGCACCGGCC   TCATCCTGAC   GCTGCAGGAA

2901   ATGGGCGCCG   ACATCGAAGT   CATCAACCCG   CGCCTTGCCG   GCGGCGAAGA

2951   CGTGGCGGAC   CTGCGCGTTC   GCTCCTCCAC   GCTGAAGGGC   GTCACGGTGC
```

Figure 5B

```
3001  CGGAAGACCG CGCGCCTTCG ATGATCGACG AATATCCGAT TCTCGCTGTC
3051  GCCGCCGCCT TCGCGGAAGG GGCGACCGTG ATGAACGGTC TGGAAGAACT
3101  CCGCGTCAAG GAAAGCGACC GCCTCTCGGC CGTCGCCAAT GGCCTCAAGC
3151  TCAATGGCGT GGATTGCGAT GAGGGCGAGA CGTCGCTCGT CGTGCGTGGC
3201  CGCCCTGACG GCAAGGGGCT CGGCAACGCC TCGGGCGCCG CCGTCGCCAC
3251  CCATCTCGAT CACCGCATCG CCATGAGCTT CCTCGTCATG GGCCTCGTGT
3301  CGGAAAACCC TGTCACGGTG GACGATGCCA CGATGATCGC CACGAGCTTC
3351  CCGGAGTTCA TGGACCTGAT GGCCGGGCTG GGCGCGAAGA TCGAACTCTC
3401  CGATACGAAG GCTGCCTGAT GAGCTCGAAT TCCCGATCGT TCAAACATTT
3451  GGCAATAAAG TTTCTTAAGA TTGAATCCTG TTGCCGGTCT TGCGATGATT
3501  ATCATATAAT TTCTGTTGAA TTACGTTAAG CATGTAATAA TTAACATGTA
3551  ATGCATGACG TTATTTATGA GATGGGTTTT TATGATTAGA GTCCCGCAAT
3601  TATACATTTA ATACGCGATA GAAAACAAAA TATAGCGCGC AAACTAGGAT
3651  AAATTATCGC GCGCGGTGTC ATCTATGTTA CTAGATCGGG GATTTGCGGC
3701  CGCGTTAACA AGCTTCTGCA GGTCCGATTG AGACTTTTCA ACAAAGGGTA
3751  ATATCCGGAA ACCTCCTCGG ATTCCATTGC CCAGCTATCT GTCACTTTAT
3801  TGTGAAGATA GTGGAAAAGG AAGGTGGCTC CTACAAATGC CATCATTGCG
3851  ATAAAGGAAA GGCCATCGTT GAAGATGCCT CTGCCGACAG TGGTCCCAAA
3901  GATGGACCCC CACCCACGAG GAGCATCGTG GAAAAGAAG ACGTTCCAAC
3951  CACGTCTTCA AAGCAAGTGG ATTGATGTGA TGGTCCGATT GAGACTTTTC
4001  AACAAAGGGT AATATCCGGA AACCTCCTCG GATTCCATTG CCCAGCTATC
4051  TGTCACTTTA TTGTGAAGAT AGTGGAAAAG GAAGGTGGCT CCTACAAATG
4101  CCATCATTGC GATAAAGGAA AGGCCATCGT TGAAGATGCC TCTGCCGACA
4151  GTGGTCCCAA AGATGGACCC CCACCCACGA GGAGCATCGT GGAAAAGAA
4201  GACGTTCCAA CCACGTCTTC AAAGCAAGTG GATTGATGTG ATATCTCCAC
4251  TGACGTAAGG GATGACGCAC AATCCCACTA TCCTTCGCAA GACCCTTCCT
4301  CTATATAAGG AAGTTCATTT CATTTGGAGA GGACACGCTG ACAAGCTGAC
4351  TCTAGCAGAT CCTCTAGAAC CATCTTCCAC ACACTCAAGC CACACTATTG
4401  GAGAACACAC AGGGACAACA CACCATAAGA TCCAAGGGAG GCCTCCGCCG
4451  CCGCCGGTAA CCACCCCGCC CCTCTCCTCT TTCTTTCTCC GTTTTTTTTT
```

Figure 5C

```
4501   CCGTCTCGGT  CTCGATCTTT  GGCCTTGGTA  GTTTGGGTGG  GCGAGAGGCG

4551   GCTTCGTGCG  CGCCCAGATC  GGTGCGCGGG  AGGGGCGGGA  TCTCGCGGCT

4601   GGGGCTCTCG  CCGGCGTGGA  TCCGGCCCGG  ATCTCGCGGG  GAATGGGGCT

4651   CTCGGATGTA  GATCTGCGAT  CCGCCGTTGT  TGGGGGAGAT  GATGGGGGGT

4701   TTAAAATTTC  CGCCGTGCTA  AACAAGATCA  GGAAGAGGGG  AAAAGGGCAC

4751   TATGGTTTAT  ATTTTTATAT  ATTTCTGCTG  CTTCGTCAGG  CTTAGATGTG

4801   CTAGATCTTT  CTTTCTTCTT  TTTGTGGGTA  GAATTTGAAT  CCCTCAGCAT

4851   TGTTCATCGG  TAGTTTTTCT  TTTCATGATT  TGTGACAAAT  GCAGCCTCGT

4901   GCGGAGCTTT  TTTGTAGGTA  GAAGTGATCA  ACCATGGCCA  ACCCCAACAA

4951   TCGCTCCGAG  CACGACACGA  TCAAGGTCAC  CCCCAACTCC  GAGCTCCAGA

5001   CCAACCACAA  CCAGTACCCG  CTGGCCGACA  ACCCCAACTC  CACCCTGGAA

5051   GAGCTGAACT  ACAAGGAGTT  CCTGCGCATG  ACCGAGGACT  CCTCCACGGA

5101   GGTCCTGGAC  AACTCCACCG  TCAAGGACGC  CGTCGGGACC  GGCATCTCCG

5151   TCGTTGGGCA  GATCCTGGGC  GTCGTTGGCG  TCCCCTTCGC  AGGTGCTCTC

5201   ACCTCCTTCT  ACCAGTCCTT  CCTGAACACC  ATCTGGCCCT  CCGACGCCGA

5251   CCCCTGGAAG  GCCTTCATGG  CCCAAGTCGA  AGTCCTGATC  GACAAGAAGA

5301   TCGAGGAGTA  CGCCAAGTCC  AAGGCCCTGG  CCGAGCTGCA  AGGCCTGCAA

5351   AACAACTTCG  AGGACTACGT  CAACGCGCTG  AACTCCTGGA  AGAAGACGCC

5401   TCTGTCCCTG  CGCTCCAAGC  GCTCCCAGGA  CCGCATCCGC  GAGCTGTTCT

5451   CCCAGGCCGA  GTCCCACTTC  CGCAACTCCA  TGCCGTCCTT  CGCCGTCTCC

5501   AAGTTCGAGG  TCCTGTTCCT  GCCCACCTAC  GCCCAGGCTG  CCAACACCCA

5551   CCTCCTGTTG  CTGAAGGACG  CCCAGGTCTT  CGGCGAGGAA  TGGGGCTACT

5601   CCTCGGAGGA  CGTCGCCGAG  TTCTACCGTC  GCCAGCTGAA  GCTGACCCAA

5651   CAGTACACCG  ACCACTGCGT  CAACTGGTAC  AACGTCGGCC  TGAACGGCCT

5701   GAGGGGCTCC  ACCTACGACG  CATGGGTCAA  GTTCAACCGC  TTCCGCAGGG

5751   AGATGACCCT  GACCGTCCTG  GACCTGATCG  TCCTGTTCCC  CTTCTACGAC

5801   ATCCGCCTGT  ACTCCAAGGG  CGTCAAGACC  GAGCTGACCC  GCGACATCTT

5851   CACGGACCCC  ATCTTCCTGC  TCACGACCCT  CCAGAAGTAC  GGTCCCACCT

5901   TCCTGTCCAT  CGAGAACTCC  ATCCGCAAGC  CCCACCTGTT  CGACTACCTC

5951   CAGGGCATCG  AGTTCCACAC  GCGCCTGAGG  CCAGGCTACT  TCGGCAAGGA
```

Figure 5D

```
6001  CTCCTTCAAC TACTGGTCCG GCAACTACGT CGAGACCAGG CCCTCCATCG
6051  GCTCCTCGAA GACGATCACC TCCCCTTTCT ACGGCGACAA GTCCACCGAG
6101  CCCGTCCAGA AGCTGTCCTT CGACGGCCAG AAGGTCTACC GCACCATCGC
6151  CAACACCGAC GTCGCGGCTT GGCCGAACGG CAAGGTCTAC CTGGGCGTCA
6201  CGAAGGTCGA CTTCTCCCAG TACGATGACC AGAAGAACGA GACCTCCACC
6251  CAGACCTACG ACTCCAAGCG CAACAATGGC CACGTCTCCG CCCAGGACTC
6301  CATCGACCAG CTGCCGCCTG AGACCACTGA CGAGCCCCTG GAGAAGGCCT
6351  ACTCCCACCA GCTGAACTAC GCGGAGTGCT TCCTGATGCA AGACCGCAGG
6401  GGCACCATCC CCTTCTTCAC CTGGACCCAC CGCTCCGTCG ACTTCTTCAA
6451  CACCATCGAC GCCGAGAAGA TCACCCAGCT GCCCGTGGTC AAGGCCTACG
6501  CCCTGTCCTC GGGTGCCTCC ATCATTGAGG GTCCAGGCTT CACCGGTGGC
6551  AACCTGCTGT TCCTGAAGGA GTCCTCGAAC TCCATCGCCA AGTTCAAGGT
6601  CACCCTGAAC TCCGCTGCCT TGCTGCAACG CTACCGCGTC CGCATCCGCT
6651  ACGCCTCCAC CACGAACCTG CGCCTGTTCG TCCAGAACTC CAACAATGAC
6701  TTCCTGGTCA TCTACATCAA CAAGACCATG AACAAGGACG ATGACCTGAC
6751  CTACCAGACC TTCGACCTCG CCACCACGAA CTCCAACATG GGCTTCTCGG
6801  GCGACAAGAA TGAACTGATC ATTGGTGCTG AGTCCTTCGT CTCCAACGAG
6851  AAGATCTACA TCGACAAGAT CGAGTTCATC CCCGTCCAGC TGTGATAGGA
6901  ACTCTGATTG AATTCTGCAT GCGTTTGGAC GTATGCTCAT TCAGGTTGGA
6951  GCCAATTTGG TTGATGTGTG TGCGAGTTCT TGCGAGTCTG ATGAGACATC
7001  TCTGTATTGT GTTTCTTTCC CCAGTGTTTT CTGTACTTGT GTAATCGGCT
7051  AATCGCCAAC AGATTCGGCG ATGAATAAAT GAGAAATAAA TTGTTCTGAT
7101  TTTGAGTGCA AAAAAAAGG AATTAGATCT GTGTGTGTTT TTTGGATCCC
7151  CGGGGCGGCC GCTCGAGCAG GACCTGCAGA AGCTAGCTTG ATGGGGATCA
7201  GATTGTCGTT TCCCGCCTTC AGTTTAAACA GAGTCGGGTT TGGATGGTCA
7251  ACTCCGGCAT ACTGCCGAAA ACAAACCAAT CCGTCACCGT CAAGGCCCCG
7301  CACCGCTGGC CGCACGCAGG AAAAATAAGT TGCGACCGCG AGCGGGCGAA
7351  TCAGAAAGGG CGTCCGGCCT TGGTCAGACA CGACAGCGAC GCGGAAAGGC
7401  TGCGCCCGCG GTGCCATCTA CAAGGGTCCA CGTCCATCCA AAAAGAGCGG
```

Figure 5E